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# **Capital Construction Practices**

## **Limited Scope Performance Audit**

**Final Report**  
**January 13, 2003**



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January 13, 2003

Mr. Jim Hedrick  
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Olympia, Washington 98504-3113

**Subject: Project Deliverables – KPMG Final Report for Phase Three – Construction Practices Performance Audit Report (Work Request No.: 0105-02-02/03-06, Contract # 30400)**

Dear Mr. Hedrick,

Attached is the KPMG January 13, 2002 Final Construction Practices Performance Audit Report per Work Request No.: 0105-02-02/03-06, Contract # 30400.

The Final reports are being submitted both in hard copy (10 copies each) and electronically.

Please review these deliverables and indicate your agreement by signing the acceptance section on the following page. Should you have any questions or comments, please do not hesitate to contact me directly at (206) 913-4496 or John O'Malley at (503) 796-7668.

Very truly yours,

KPMG LLP

A handwritten signature in black ink that reads "Karen Saunders". The signature is written in a cursive, flowing style.

Karen Saunders  
*Partner*

Please indicate agreement and acceptance of these deliverables by signing below:

**Accepted on behalf of the Office of Financial Management (OFM), State of Washington by:**

**Name:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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## *Executive Summary*

## **I. Project Scope, Approach, and Methodology**

On July 22, 2002, the Washington State Office of Financial Management (OFM) contracted with KPMG, LLP to conduct a performance audit of State capital construction practices. The six State agencies reviewed were:

- › Washington State Department of Transportation;
- › University of Washington;
- › Eastern Washington University;
- › The Evergreen State College;
- › Washington State University; and
- › Washington State Department of General Administration.

The scope of this review included the following:

- › The validity and reliability of management's performance measures;
- › documentation of internal controls;
- › the adequacy of systems used for measuring, reporting, and monitoring performance;
- › the extent to which legislative and regulatory guidelines, goals and mandates, and organizational goals and objectives are being achieved; and
- › identification and recognition of better practices.

The KPMG team began the performance audit by requesting a list of documents relating to construction practices from each agency, which were to be provided on or before our arrival to conduct focus interviews. The KPMG team also prepared a listing of personnel or positions involved in construction activities at each agency for focus interviews.

KPMG then conducted the focus interviews and reviewed the documentation provided by each agency. The goal of the focus interviews was to identify and understand each agency's major capital construction activities, the performance measures in place to monitor those activities, the internal controls and systems supporting the performance measures, relevant legislative and regulatory goals, guidelines and mandates, agency and capital construction department goals and objectives, and agency reported better practices.

KPMG also conducted validity and reliability testing of five specific performance measures for three current capital construction projects including building projects and highway projects for the Department of Transportation and the University of Washington.

## **II. Results in Brief**

We recognize that the agencies within the scope of this project vary significantly in terms of their respective missions, governing mandates, operational budgets and staffing complements. Despite these key distinctions, industry standards suggest that there should be some uniformity with regards to monitoring the performance of major capital initiatives.

Our recommendations apply to each of the agencies and are intended to help standardize the tools, delivery strategies, communications and types of performance measurement reporting that

will increase the effective and efficient use of resources. Each agency, depending on its capital construction department's level of maturity and sophistication, will find varying levels of the recommendations helpful and appropriate to implement. A more detailed description of the methodology used for the performance audit is included in Chapter 1.

This performance audit is not intended to be a comprehensive and exhaustive review of all capital construction practices and performance measurement activities relating to construction for each agency. Nor does it provide an assessment or opinion regarding the overall efficiency of each agency's execution of capital construction projects. The purpose of this performance audit is to broadly assess each agency's ability to measure its performance related to capital construction.

Our findings and recommendations are summarized below.

## ***Chapter 2: Findings and Recommendations***

This section summarizes the findings and recommendations associated with all of the agencies' capital construction performance measures. The complete section of Findings and Recommendations are located in Chapter 2.

### **Finding One**

***There is an opportunity to improve the standardization within and between each agency related to performance management practices and measures.***

During our analysis of the agencies, we observed a wide variety of capital construction organizational missions, governing mandates, operational budgets and staffing complements. Despite these distinctions, we noted very few "standards" and little consistency with regard to performance management. Industry standards, however, suggest that there should be some uniformity with regards to monitoring the performance of capital construction projects, regardless of the agency mission or organization.

KPMG recommends establishing a "baseline" set of performance measures applicable to all agencies, in addition to specific performance measures unique to each agency's business. This recommendation is not intended to create another layer of reporting requirements for each agency. In contrast, it is meant to eliminate paperwork, as well as performance measures that are insufficient or irrelevant to each agency's performance management processes. The implementation of baseline performance measures should create a consistent, standardized performance management process that makes reporting performance more meaningful and effective. At a minimum, we would expect to see the following types of performance measures in place at each agency:

- 1) Cost Performance
  - a. Historical Cost Performance
  - b. Projected Cost Performance
  - c. Cost Metrics/Cost Benchmarking
- 2) Schedule Performance
  - a. Historical Schedule Performance
  - b. Projected Schedule Performance
- 3) Scope/Quality Performance

Further development of these performance measures should include each agency's involvement. This would enable agencies to educate stakeholders on their business as well as minimize the creation of performance measures that foster more work, but are not relevant to the individual agency's performance management process.

**Finding Two**

***There is an opportunity to improve communication between the agencies, the legislative body, OFM, other key stakeholders and constituents regarding capital construction practices and performance.***

During site visits and interviews conducted by the KPMG team, each of the agencies commented that there is often a common theme to the questions asked by stakeholders. The theme tends to focus on project cost and status. Generally speaking, agencies voiced concern that stakeholders normally do not possess adequate understanding of the requirements and constraints placed upon agency leadership, which the agencies contend results in unnecessary audits, and superfluous reporting and control requirements. Conversely, it appears that stakeholders may not be receiving the information they perceive necessary to answer their questions, to make informed decisions, and that provides the overall assurance that the State's capital construction funds are being managed appropriately. This recommendation is intended to open a channel of effective communication between each agency and their respective stakeholders, as opposed to create more reporting requirements.

KPMG recommends increasing the frequency and effectiveness of communication with all stakeholders. Communication should be supported with clear, concise and uniform performance measures to improve understanding of capital construction business practices and facilitate informed decision-making. Each agency should ensure performance measures not only meet the requirements of its business, but also satisfy the information needs of their key stakeholders. Similarly, stakeholders must define their needs in terms of performance measures and effectively communicate these with each agency. We recommend this communication process include educational meetings to establish common standards regarding the types of information that should be reported, to whom and with what frequency.

**Finding Three**

***Generally, the agencies' capital construction performance measures are not clearly tied back to organizational or departmental goals and objectives.***

While we were able to find broad agency and capital construction department goals and objectives governing capital construction, we were generally not able to clearly link those goals and objectives back to specific performance measures. In some cases, the agency or department goal or objective was measurable, but was not being measured (or was only partially measured). In other cases, the agency or department goal or objective appeared to be too subjective and ambiguous to be supported with specific and effective performance measures.

KPMG recommends agencies consider revisiting goals, objectives and supporting performance measures on a periodic basis to ensure such metrics appropriately reflect organizational priorities and external market conditions. Each agency should have clearly defined goals and objectives at the capital construction department level, supported by objective, quantifiable performance measures. Goals and objectives should be specific, measurable, action-oriented, have achievable



results, be time-based and flow down through the organization to the project level so that performance measures can effectively demonstrate and communicate how they align with and support the agency goals and objectives.

**Finding Four**

***In none of the agencies audited did we discover an appropriate mechanism or set of criteria routinely used to determine project delivery strategy (the way in which projects are executed, i.e., General Contractor/Construction Manager (GC/CM), Turn-key, Negotiate/Select, Construction Manager Not at Risk, Design/Bid/Build, Design/Build) and/or contract compensation vehicles (the method for contract payment, i.e., Cost Plus Fee, Lump Sum, Cost Plus Fixed Fee, Unit Price, Time & Materials, Guaranteed Maximum Price).***

KPMG recommends the State formally assess whether each agency has the most appropriate *project delivery strategies* and *contract compensation vehicles* available for use. We understand these topics were regularly addressed in the Alternative Public Works Committee’s meetings that included Higher Education agencies and WSDOT personnel, to name a few. While this group has formally been disbanded, we understand that they continue to meet for ad-hoc sessions. We recommend the State consider formal sponsorship of these meetings as a starting point.

The process for selecting the most appropriate *project delivery strategy* should not be based on one factor alone, e.g. project cost; rather, it should be based on a variety of factors unique to the project and the agency responsible for its delivery. We recommend a delivery strategy selection be supported by improved decision-making policies, tools, procedures and performance measures to promote the most appropriate decision-making and allow for accurate measurement of the relative effectiveness of each solution.

Each agency should work closely with the legislature to develop an analytical tool, which will help determine a *project delivery strategy* and a *contract compensation vehicle*. This tool should be tailored to each agency’s business and project types. The development process will require a collaborative effort by both legislature and agencies to enable a useful tool that recognizes the different applications of the tool based on each agency’s business needs.

**Finding Five**

***We observed an opportunity for improvement of each agency’s ability to measure and report project/program performance in terms of scope, schedule and budget at the portfolio level (a rolled up view of all capital projects within a program or agency).***

Throughout each agency, we observed a wide variety of systems, tools, reports and processes employed to assess scope, schedule and budget performance for agency projects at the portfolio level. In most cases, each agency demonstrated a limited ability to produce reports providing meaningful information on the health of its portfolio of projects in terms of scope and schedule.

KPMG recommends assessing agency-specific needs relative to the ability to produce portfolio level reports with the goal of standardizing scope, schedule and budget reporting requirements where possible. Each agency should work toward either refining their existing systems and controls, or consider selecting and implementing new systems and controls, which should provide the ability to view project performance at the portfolio level in an “executive dashboard” or “stoplight” reporting format. This recommendation is more applicable to agencies with a

substantial number of projects at any point in time as opposed to agencies with fewer major projects.

### ***Chapter 3: Other Pertinent Information***

Listed in this section are issues and comments raised by particular agencies outside the scope of this performance audit. This section tries to capture present the from the specific agency's point of view. The complete Other Pertinent Information section is located in Chapter 3.

#### **Observation One – The Evergreen State College**

***The State should consider reviewing the composition of the Facilities Condition Index used by higher educational facilities.***

Facilities personnel at the Evergreen State College noted several shortcomings in the Facilities Condition Index now in use at higher educational facilities throughout the State. Specifically, the Facilities Condition Index does not address programmatic needs, including life safety, fire codes, ADA requirements, seismic upgrades, current technology needs and purpose of building; rather it only looks at the cost to restore the building to its original state.

#### **Observation Two – The Evergreen State College**

***The State should review, clearly delineate and clarify standards for the requirements to award construction contracts to the “Lowest Responsive Bidder”.***

Facilities personnel also commented that the requirement for awarding the “Lowest Responsive Bidder” does not consider whether or not the bidder has relevant experience, technical expertise, or is more likely to cause a condition that may lead to higher costs to the stakeholders.

#### **Observation Three – Washington State University**

***Capital construction windows do not coincide with the State's appropriations cycle.***

Facilities personnel at the Washington State University made a specific observation that the biennium begins on July 1, every other year. The construction window for the Eastern portion of Washington begins mid-May, but due to a lack of understanding of the unique impact of weather (i.e. soil conditions, freezing, snow, rain), proximity to labor pool costs of labor and materials, etc. on construction in the Pullman area, several issues arise. Since the biennium cycle is not compatible with the construction cycle in the Pullman area, a method of early, or “pre” allotment would result in a smoother, more cost-effective start-up of construction. Furthermore, because the biennium begins on July 1, higher educational agencies in general have only one complete construction season in which to complete projects after funds are appropriated. If the timeline for capital projects and the biennium cycle conflict, this leads to reappropriations.

#### **Observation Four - Department of General Administration**

***The lack of automated tools for capital construction management risks non-optimization of project funds.***

While conducting focus interviews at the DGA, we observed that there is a lack of tools such as Job Order Contracting to streamline smaller projects so that dollars are maximized for the task at hand. For some smaller projects, the requirement to create complete design documents for the

bidding process (design/bid/build) makes the task of getting work done inefficient and more cumbersome than the task requires. Job Order Contracting would make the projects more efficient, less expensive, and timelier, if it were available up to a certain value threshold per project and up to a ceiling for the contractor.

## ***Chapter 1: Introduction and Methodology***

## **Introduction**

The Washington State Legislature directed the Washington State Office of Financial Management (OFM) under Section 127 of Engrossed Substitute Senate Bill 6387 to conduct a performance audit on the capital construction practices of six State agencies.

### ***Project Background***

On July 22, 2002, OFM contracted with KPMG LLP to conduct a performance audit of State capital construction practices. The six State agencies reviewed were:

- › Washington State Department of Transportation;
- › University of Washington;
- › Eastern Washington University;
- › The Evergreen State College;
- › Washington State University; and
- › Washington State Department of General Administration.

The scope of this audit included a review of the following:

- › The validity and reliability of management's performance measures;
- › a review of internal controls and internal audits;
- › the adequacy of systems used for measuring, reporting, and monitoring performance;
- › the extent to which legislative, regulatory, and organizational goals and objectives are being achieved; and
- › identification and recognition of better practices.

The KPMG team began the performance audit by requesting a list of documents relating to construction practices from each agency, which were to be provided on or before our arrival to conduct focus interviews. The KPMG team also prepared a listing of personnel or positions involved in construction activities at each agency for focus interviews.

KPMG then conducted the focus interviews and reviewed the documentation provided by each agency. The goal of the focus interviews was to identify and understand each agency's major capital construction activities, the performance measures in place to monitor those activities, the internal controls and systems supporting the performance measures, relevant legislative and regulatory goals, guidelines and mandates, agency and capital construction department goals and objectives, and agency reported better practices.

KPMG also conducted validity and reliability testing of five specific performance measures for three current capital construction projects including building projects and highway projects for the Department of Transportation and the University of Washington.

## Methodology *Performance Audit Approach and Methodology*

In the execution of the performance audit work plan, the KPMG team employed the following methodologies:

- › **Focus Interviews.** The KPMG team conducted focus interviews with key personnel involved in construction activities from each agency. The goal of the focus meetings was to identify and understand the agency's major capital construction activities, the performance measures in place to monitor those activities, the internal controls and systems supporting the performance measures and activities, the relevant legislative and regulatory goals, guidelines and mandates, agency and capital construction department goals and objectives, and agency reported better practices.
- › **Document Review.** The KPMG team reviewed documentation relating to construction processes and better practices received from each agency, as well as readily available prior external audit reports to help us understand previously identified areas related to performance measurement issues.
- › **Functional Analysis.** The KPMG team identified and examined key capital construction activities performed by each agency, the systems and controls around those activities, and the methods employed by each agency to measure the performance of those activities.
- › **Controls and Systems Assessment.** The KPMG team documented each agency's self-reported controls and systems, then inquired about the general adequacy of each agency's information technology systems, i.e. each system's ability to retrieve, store and report data; and the adequacy of internal controls relating to cost, schedule and scope. KPMG also documented self-reported legislative and regulatory mandates; however, KPMG did not validate adherence to each mandate under the scope of this performance audit.
- › **Performance Measure Study.** KPMG documented each agency's self-reported performance measures relating to capital construction processes and reviewed the apparent validity of each performance measure. KPMG also tested the validity and reliability of five specific performance measures for three current capital construction projects including building projects and highway projects for the Department of Transportation and the University of Washington. KPMG did not request or receive physical examples of each performance measure reported, nor did we review the way that each performance measure is used by each agency.

### *Constraints and Limitations*

Constraints and limitations present special factors that should be considered in the interpretation of the performance audit results. Key factors to consider include:

- › This performance audit is not intended to be a comprehensive and exhaustive review of all capital construction practices and performance measurement activities relating to construction for each agency, nor does it provide an assessment or opinion regarding the overall efficiency of each agency's execution of capital construction projects. The purpose of this performance audit is to broadly assess each agency's ability to measure its performance related to capital construction.
- › In the execution of the performance audit, the KPMG team followed generally accepted government audit standards as set forth in the General Accounting Office's Government Auditing Standards "Yellow Book" (see Appendix B for the "Yellow Book" reference table).
- › In the absence of a State definition, the KPMG team defined performance measures as data or information collected during the course of (or following completion of) a capital project/portfolio for the purpose of measuring performance against an established baseline or goal, identifying areas where behavior or performance requires attention, and/or evaluating the overall effectiveness of the capital construction program.
- › The KPMG team's tasks were limited to collecting information provided by each agency and did not include assembling, disseminating, or compiling any information not readily available or otherwise organized by each agency. KPMG did not validate secondary sources of information.
- › KPMG conducted focus interviews with each agency and relied primarily on testimonial, rather than documentary evidence. Any testing or auditing performed by KPMG was not substantive in nature.

### *Report Organization*

The KPMG team organized the performance audit of agencies in the following manner:

- › **Executive Summary:** summarizes findings and recommendations with respect to key capital construction performance measurement opportunities and associated recommendations for each agency.
- › **Introduction and Methodology:** describes the performance audit scope, approach, and methodology used to conduct fieldwork activities, as well as limitations and constraints pertinent to interpretations of the performance audit findings.

- › **Findings and Recommendations:** recommendations apply to all of the agencies and are intended to help standardize the tools, methodologies, communications and types of reporting that will increase the effective and efficient use of resources allotted to each agency.
- › **Other Pertinent Information:** lists issues considered outside the scope of this performance audit, but are included in compliance with Yellow Book standards.
- › **Appendices:** presents agency responses and a General Accounting Office (GAO) “Yellow Book” Reference Table.



## ***Chapter 2: Findings and Recommendations***

## Chapter Overview

This chapter outlines findings resulting from analysis of each agency’s capital construction performance measures and highlights any key findings and recommendations learned during the focus interviews, document review, review of internal controls, review of construction activities, and identification of better practices.

Our recommendations apply to each of the agencies and are intended to help standardize the tools, delivery strategies, communications and types of performance measurement reporting that should increase the effective and efficient use of resources allocated to each agency. Each agency, depending on its capital construction department’s level of maturity and sophistication, will find varying levels of the recommendations helpful and appropriate to implement.

### *Finding One*

***There is an opportunity to improve the standardization within and between each agency related to performance management practices and measures.***

During our analysis of the agencies, we observed a wide variety of capital construction organizational missions, governing mandates, operational budgets and staffing complements. Despite these distinctions, we noted very few “standards” and little consistency with regard to performance management. Industry standards, however, suggest that there should be some uniformity with regards to monitoring the performance of major capital initiatives, regardless of the agency mission or organization.

The potential impacts of non-standardized performance measures on the State include:

- › Inconsistent performance measures (for key metrics such as scope, schedule and budget performance) limiting effective communication with internal stakeholders and constituents.
- › Redundancy in agency efforts implementing effective and appropriate performance measures.
- › Reduced opportunity to effectively manage construction activities at the portfolio level.
- › Limited efficiency in support of mandated external audits.

### ***Recommendation One***

In the absence of uncovering formal “baseline” performance measures to evaluate each agency against, KPMG focused on assessing each agency’s specific performance measures, determining the relative commonality of those performance measures, and combining or augmenting those with “industry standard” performance measures based on our professional industry experience.

This recommendation is not intended to create another layer of reporting requirements for each agency. In contrast, it is meant to eliminate paperwork, as well as performance measures that are insufficient or irrelevant to each agency’s performance management processes. The implementation of baseline

performance measures should create a consistent, standardized performance management process that makes reporting performance more meaningful and effective.

We contend that consistent and appropriate performance measures may improve the ability of each agency to manage scope, schedule and budget performance, as well as enhance timely identification of potential cost or schedule overruns.

In addition to recommending that each agency develop specific performance measures unique to their own operations, we suggest the State consider establishing the following set of “baseline” performance measures in the three major monitoring areas of cost, schedule and performance monitoring.

Further development of these performance measures should include each agency’s involvement. This would enable agencies to educate stakeholders on their business as well as minimize the creation of performance measures that foster more work, but are not relevant to the individual agency’s performance management process.

#### 1) **COST PERFORMANCE:**

- a) *Historical Cost Performance:* High-level historical project cost performance against original budget by project, summarizing and reporting results at the portfolio level.
- b) *Projected Cost Performance:* Projected cost performance against original budget by project, with the ability to summarize and report results at the portfolio level.

(Note: Unlike the Historical Cost Performance measure, which considers the cost status at project completion or point-in-time, Projected Cost Performance can be used to objectively forecast future cost performance over the lifecycle of the project. The goal of this type of performance measure is to identify those projects in jeopardy of exceeding budget and provide sufficient advanced warning to take corrective action.)

- c) *Cost Metrics/Cost Benchmarking:* Relative efficiency in which an agency executes projects from a cost standpoint as compared to similar projects and historical agency performance.

(Note: Performance measures in this category will likely vary by project type, i.e., highways, buildings, rail projects, etc. Data for such metrics may be obtained either at the gross level, e.g. cost per square foot for building projects or cost per lane mile for highway projects, or at the unit/cost component level, such as percentage of design/engineering cost of overall project costs.)

## 2) SCHEDULE PERFORMANCE:

- a) *Historical Schedule Performance*: High-level historical project schedule performance against original schedule by project, summarizing and reporting results at the portfolio level.
- b) *Projected Schedule Performance*: Projected schedule performance against original schedule by project, with the ability to summarize and report results at the portfolio level.

(Note: Unlike the Historical Schedule Performance measure, which considers the schedule status at project completion or a point-in-time, Projected Schedule Performance can be used to objectively forecast future schedule performance over the lifecycle of the project. The goal of such a measure is to identify those projects in jeopardy of exceeding the scheduled completion date and to provide sufficient advanced warning to take corrective action.)

## 3) SCOPE/QUALITY PERFORMANCE:

Generally speaking, scope/quality performance measures are more difficult to establish than cost and schedule measurements. Each agency should carefully consider how to measure scope/quality performance, since it typically varies by project type. At a minimum, industry standards dictate that some measure of project change orders and claims, as well as some measure of customer or stakeholder satisfaction is appropriate.

- › **Washington State Ferries (WSF)** - During our review of the Department of Transportation, we noted that WSF Terminal Planning/Design has implemented an enterprise-wide “earned value” system for measuring project performance. It appears this system provides WSF the ability to measure cost and schedule performance consistent with this recommendation.

***Finding Two*** *There is an opportunity to improve communication between the agencies, the legislative body, OFM, other key stakeholders and constituents regarding capital construction practices and performance.*

During site visits and interviews conducted by the KPMG team, each of the agencies commented that there is often a common theme to the questions asked by stakeholders. The theme tends to focus on project cost and status. Generally speaking, agencies voiced concern that stakeholders normally do not possess adequate understanding of the requirements and constraints placed upon agency leadership, which the agencies contend results in unnecessary audits, as well as superfluous reporting and control requirements. Conversely, it appears that stakeholders may not be receiving the information they perceive necessary to answer their questions, to make informed decisions, and that provides the overall assurance that the State’s capital construction funds are being managed

appropriately.

Frequent audits, studies, and/or requests for information often occur in order to obtain information readily available at each agency. Other times, due to limitations in each agency's performance measures, the necessary information may not be readily available for stakeholders to review, resulting in insufficient information to make informed decisions. Lack of consistent and coordinated performance measures may result in confusion, frustration, reduced agency and stakeholder credibility, and redundancy of information gathering efforts by both agency and stakeholder representatives.

***Recommendation Two***

Increase the frequency and effectiveness of communication with all stakeholders. Communication should be supported with clear, concise and uniform performance measures to improve understanding of capital construction business practices and facilitate informed decision-making. Each agency should ensure performance measures not only meet the requirements of its business, but also satisfy the information needs of their key stakeholders. Similarly, stakeholders must define their needs in terms of performance measures and effectively communicate these with each agency. We recommend this communication process include educational meetings to establish common standards regarding the types of information that should be reported, to whom and with what frequency. This recommendation is intended to open a channel of effective communication between each agency and their respective stakeholders, as opposed to create more reporting requirements.

***Finding Three Generally, the agencies' capital construction performance measures are not clearly tied back to organizational or departmental goals and objectives.***

While we were able to find broad agency and capital construction department goals and objectives governing capital construction, we were generally not able to clearly link those goals and objectives back to specific performance measures. In some cases, the agency or department goal or objective was measurable, but was not being measured (or was only partially measured). In other cases, the agency or department goal or objective appeared to be too subjective and ambiguous to be supported with specific and effective performance measures. Some examples of subjective and/or ambiguous goals and objectives observed during this performance audit include the following:

- › Improve public understanding of agency mission
- › Conduct business in a manner that enhances public confidence
- › Maximize use of existing funds
- › Operate effectively as a team
- › Reach out to stakeholders

Based on the performance measures in place, agencies and stakeholders do not appear able to readily measure the effectiveness or trend improvements against some of their established goals and objectives given their current ambiguity and

lack of alignment.

***Recommendation Three***

Consider revisiting goals, objectives and supporting performance measures on a periodic basis to ensure such metrics appropriately reflect organizational priorities and external market conditions. Each agency should have clearly defined goals and objectives at the capital construction department level, supported by quantifiable performance measures. Goals and objectives should be specific, measurable, action-oriented, have achievable results, be time-based and flow down through the organization to the project level so that performance measures can effectively demonstrate and communicate how they align with and support the agency goals and objectives.

- › **Department of General Administration (DGA)** – The DGA business plan for the 2001 – 2003 biennium was the best example we reviewed as part of this performance audit. The DGA business plan clearly linked vision to specific department level goals and objectives, which were in turn supported by objective performance measures.

***Finding Four*** *In none of the agencies audited did we discover an appropriate mechanism or set of criteria routinely used to determine project delivery strategy (the way in which projects are executed, i.e., General Contractor/Construction Manager (GC/CM), Turn-key, Negotiate/Select, Construction Manager Not at Risk, Design/Bid/Build, Design/Build) and/or contract compensation vehicles (the method for contract payment, i.e., Cost Plus Fee, Lump Sum, Cost Plus Fixed Fee, Unit Price, Time & Materials and Guaranteed Maximum Price).*

Based on our observation, agencies have no means to determine if the most effective *project delivery strategies* and *contract compensation vehicles* are being selected and utilized. Similarly we did not observe an adequate set of criteria or process that exists to establish the project delivery strategy and contract compensation vehicles should be applied to a particular project. We also noted that The Evergreen State College and Eastern Washington University do not have the ability to use some delivery strategies.

Public and private institutions throughout the United States utilize a variety of *project delivery strategies* and *contract compensation vehicles* for delivery of construction projects. It is a common industry practice to mix *project delivery strategies* with *contract compensation vehicles* in a variety of combinations based upon the nature of project.

In light of these standards, we noted the following:

- › Agencies do not appear to have the ability or infrastructure to select from the full industry range of options available for *project delivery* and *contract compensation*.
- › Agencies do not clearly define the evaluation and selection process for determining which options to use on a particular project. For example,

agencies may elect to use the General Contractor/Construction Manager (GC/CM) form of project delivery for projects budgeted over \$10 million. This recognizes project cost as part of the decision-making process; however, there are many other factors, which should be considered in conjunction with project cost. Furthermore, we find no industry standard or general logic that links a cost ceiling of \$10 million to the use of the specific delivery strategy of GC/CM or Design/Build.

- › The ability for each agency to measure whether the most effective delivery strategies and contract compensation methodologies are being utilized is very limited. Conversely, it appears that most agencies believe one option is better than another based on prior experience rather than specific performance measures (such as cost performance metrics, schedule performance metrics, percent of change orders or contract claims). While such a decision process may be logical and functioning in the short run, it does not account for inevitable changes in staff and the increasing erosion of human capital that governmental organizations now experience.
- › There appears to be no formalized process in place to regularly assess project delivery strategies and contract compensation tools and processes.

#### ***Recommendation Four***

The State should formally assess whether each agency has the most appropriate *project delivery strategies* and *contract compensation vehicles* available for use. We understand these topics were regularly addressed in the Alternative Public Works Committee's meetings that included Higher Education agencies and WSDOT personnel, to name a few. While this group has formally been disbanded, we understand that they continue to meet for ad-hoc sessions. We recommend the State consider formal sponsorship of these meetings as a starting point.

The process for selecting the most appropriate *project delivery strategy* should not be based on one factor alone, e.g. project cost; rather, it should be based on a variety of factors unique to the project and the agency responsible for its delivery. We recommend a delivery strategy selection be supported by improved decision-making policies, tools, procedures and performance measures to promote the most appropriate decision-making and allow for accurate measurement of the relative effectiveness of each solution.

Each agency should work closely with the legislature to develop an analytical tool, which will help determine a *project delivery strategy* and a *contract compensation vehicle*. This tool should be tailored to each agency's business and project types. The development process will require a collaborative effort by both legislature and agencies to enable a useful tool that recognizes the different applications of the tool based on each agency's business needs.

- › **Washington State Department of Transportation (WSDOT)** – Having recently completed a transportation project using the design-build *project*

*delivery strategy*, we understand the WSDOT is currently formally evaluating the relative success of the project compared to the design-bid-build delivery strategy it traditionally uses.

***Finding Five*** ***We observed an opportunity for improvement of each agency’s ability to measure and report project/program performance in terms of scope, schedule and budget at the portfolio level (a rolled up view of all capital projects within a program or agency).***

Throughout each agency, we observed a wide variety of systems, tools, reports and processes employed to assess scope, schedule and budget performance for agency projects at the portfolio level. In most cases, however, agencies demonstrated only a limited ability to produce reports providing meaningful information on the health of their portfolio of projects in terms of scope and schedule.

With respect to financial reporting, each agency is required to measure and report amounts spent against program budget to the OFM, typically on a monthly basis. We found few other useful reports summarizing portfolio-level financial information. The importance of, and challenges associated with, generating effective portfolio-level reporting is directly proportional to the size of the portfolio. For smaller programs such as WSDOT Rail and Facilities, Eastern Washington University and The Evergreen State College, portfolio-level financial information could conceivably be collected and generated manually quite effectively.

However, for larger programs such as WSDOT Highways, University of Washington, Department of General Administration, and Washington State University, effective portfolio-level reporting is an essential element in maintaining control over a large portfolio of projects, and equally as important is the ability to communicate that status to other stakeholders. Given the breadth of project types and their corresponding high dollar value, we would expect to see sophisticated tracking and reporting systems in place at these agencies designed to closely monitor the significant resources invested by the State.

Based on the information available for our review we believe each agency:

- › understands the importance of effective portfolio-level reporting,
- › has made significant strides over the last few years implementing such reports,
- › and believes in the importance of continued improvement.

***Recommendation Five***

Assess agency-specific needs relative to the ability to produce portfolio level reports with the goal of standardizing scope, schedule and budget reporting requirements where possible. Each agency should work toward either refining its existing systems and controls, or consider selecting and implementing new systems and controls, which should provide the ability to view project performance at the portfolio level in an “executive dashboard” or “stoplight”



reporting format. This recommendation is more applicable to agencies with a substantial number of projects at any point in time as opposed to agencies with fewer major projects.

Some examples of what agencies are doing to address portfolio-level reporting:

- › **Washington State Department of Transportation (WSDOT)** – The WSDOT is in the process of implementing a new enterprise project management system (PDIS – Project Delivery Information System). As described to us, this system will provide improved portfolio level reporting capabilities if successfully implemented.
- › **University of Washington Capital Project Office (UW CPO)** - Of all the agencies reviewed, the UW CPO appears best positioned to produce portfolio level reports for scope, schedule and budget status, having recently implemented an enterprise project management system.

## ***Chapter 3: Other Pertinent Information***

## Chapter Overview

This chapter highlights findings or areas that may require further attention, but are considered outside the scope of this performance audit.

### **Observation One** *The Evergreen State College*

***The State should consider reviewing the composition of the Facilities Condition Index used by higher educational facilities.***

Facilities personnel at the Evergreen State College noted several shortcomings in the Facilities Condition Index now in use at higher educational facilities throughout the State. Specifically, the Facilities Condition Index does not address programmatic needs, including life safety, fire codes, ADA requirements, seismic upgrades, current technology needs and purpose of building; rather it only looks at the cost to restore the building to its original state.

### **Observation Two** *The Evergreen State College*

***The State should review, clearly delineate and clarify standards for the requirements to award construction contracts to the “Lowest Responsive Bidder”.***

Facilities personnel also commented that the requirement for awarding the “Lowest Responsive Bidder” does not consider whether or not the bidder has relevant experience, technical expertise, or is more likely to cause a condition that may lead to higher costs to the stakeholders. A recent performance audit of the State’s personal and purchased services contracting practices recommended establishing a formalized, statewide vendor evaluation process for personal and purchased contracting vendors. The report stated that the absence of such a system now, coupled with some agencies’ independent contracting practices, creates the potential for unwary agencies to engage professional services providers with histories of poor performance.

### **Observation Three** *Washington State University*

***Capital construction windows do not coincide with the State’s appropriations cycle.***

Facilities personnel at the Washington State University made a specific observation that the biennium begins on July 1, every other year. The construction window for the Eastern portion of Washington begins mid-May, but due to a lack of understanding of the unique impact of weather (i.e. soil conditions, freezing, snow, rain), proximity to labor pool, costs of labor and materials, etc. on construction in the Pullman area, several issues arise. One such issue is that even though CPD performs as much preliminary paperwork as possible to facilitate a quick start when funds are available, WSU’s inability to sign contracts until July 1 – or even

later – results in serious project impacts. Although OFM typically provides a letter authorizing expenditures of up to three months of WSU’s cash flow, this does not allow for signing/encumbering a contract. Since the biennium cycle is not compatible with the construction cycle in the Pullman area, a method of early, or “pre” allotment would result in a smoother, more cost-effective start-up of construction. Furthermore, because the biennium begins on July 1, higher educational agencies in general have only one complete construction season in which to complete projects after funds are appropriated. If the timeline for capital projects and the biennium cycle conflict, this leads to reappropriations.

***Observation Department of General Administration  
Four***

***The lack of automated tools for capital construction management risks non-optimization of project funds.***

While conducting focus interviews at the DGA, we observed that there is a lack of tools such as Job Order Contracting to streamline smaller projects so that dollars are maximized for the task at hand. For some smaller projects, the requirement to create complete design documents for the bidding process (design/bid/build) makes the task of getting work done inefficient and more cumbersome than the task requires. Job Order Contracting would make the projects more efficient, less expensive, and timelier, if it were available up to a certain value threshold per project and up to a ceiling for the contractor.

## *Appendices*

## *Appendix A: Agency Responses*



STATE OF WASHINGTON

DEPARTMENT OF GENERAL ADMINISTRATION

DIVISION OF ENGINEERING AND ARCHITECTURAL SERVICES

206 General Administration Building, P.O. Box 41012 • Olympia, Washington 98504-1012 • (360) 902-7272

FAX (360) 753-2848

November 26, 2002

Jim Hedrick, Legislative Director  
Office of Financial Management  
300 Insurance Building  
Olympia, WA 98504-3113

Re: Capital Construction Practices Performance Audit

Dear Mr. Hedrick:

We have reviewed the Capital Construction Practices Performance Audit and have the following comments regarding the findings for the Division of Engineering and Architectural Services (E&AS):

**Finding One**

We agree that it would be helpful to establish meaningful performance measures for budget, schedule, and scope/quality that would apply to all agencies. General Administration (GA) is using performance measures for our capital project management practices however, we're not sure that we're measuring the right things. If other agencies or the private sector have found measures that work better, we would like to know about them. In the report, there are occasional references to "Industry Standards" for measurement, but nothing specific.

A good performance measure needs to measure something that leads to improved project management and communication. However, I am concerned that we may set performance goals based upon what we can easily measure rather than on something that really matters and is hard to measure. If the easy to obtain performance measures are meaningless, then they will be ignored...or worse, they will focus attention on the wrong project management activities.

If this report results in comprehensive interagency discussions about meaningful, but flexible, measurements, there is a chance for improvement. If the "Industry Standards" mentioned in the report exist, then all agencies may benefit from adopting them.

**Finding Two**

We agree with this finding. Within GA, we have a vast amount of existing data regarding our capital projects and the projects we manage on behalf of other agencies. This

OFFICE OF FINANCIAL MANAGEMENT



Jim Hedrick  
November 26, 2002  
Page Two

information can be better communicated to OFM, the Legislature, and other stakeholders. To ensure process can be as efficient as possible, it is important to establish the kind of information to be reported and the right reporting frequency. Establishing common reporting standards for all agencies would be helpful.

**Finding Three**

I believe that GA has made significant progress to better link performance measures for E&AS to the agency's strategic plan. I agree with the report findings regarding goals and objectives. We have the same challenge here as described under Finding One. We need to find the right performance measures for capital construction projects.

**Finding Four**

We agree that the procedures for determining the project delivery strategy can be better documented. Decisions regarding construction bidding strategy or the use of alternative public works procedures are fairly complex. It would be helpful to document the basics and the factors to consider in making these decisions.

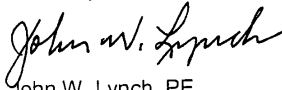
We also agree that the Alternative Public Works Methods Oversight Committee (APWMOC) was a useful forum for state agencies and stakeholders to discuss issues and improve public works in the state of Washington. GA is participating in a number of forums that are useful regarding public works practices but these forums do not have the same ability to affect legislation that the APWMOC had.

**Finding Five**

GA has an existing database that allows us to produce "portfolio" level reports for our capital projects in terms of scope, budget, and schedule. This system is currently fulfilling our internal needs. If there are other systems that can do a better job or if there are reporting formats that are more useful and informative to our clients and stakeholders, we are willing to change and improve our system.

Thank you for the opportunity to comment.

Sincerely,



John W. Lynch, PE  
Assistant Director

cc: Rob Fukai, GA  
Grant Fredricks, GA  
E&AS Managers





**Washington State  
Department of Transportation**  
**Douglas B. MacDonald**  
Secretary of Transportation

**Transportation Building**  
310 Maple Park Avenue S.E.  
P.O. Box 47300  
Olympia, WA 98504-7300  
360-705-7000  
TTY: 1-800-833-6388  
[www.wsdot.wa.gov](http://www.wsdot.wa.gov)

December 2, 2002

Mr. Jim Hedrick, Legislative Director  
Office of Financial Management  
PO Box 43113  
Olympia, WA 98504-3113

Dear Mr. Hedrick:

The Washington State Department of Transportation is pleased to see the results of the recent limited scope performance audit on Capital Construction Practices.

Concerning the findings of the audit:

*Finding One*

*There appears to be an opportunity to improve the standardization within and between each agency related to performance management practices and measures.*

WSDOT would welcome the inter-agency collaboration this finding suggests. This can be a useful tool to improve construction programs for all state agencies. WSDOT will be pleased to work with OFM and the legislature to develop standardized performance management practices and measures. Recent WSDOT work in the area of accountability should be helpful in this effort (see the WSDOT Accountability website at <http://www.wsdot.wa.gov/accountability/>). It must be noted, however, that building highways is fundamentally different from building office buildings and other “vertical” structures, and this fact will have to be taken into account as such measures are developed.

*Finding Two*

*There appears to be an opportunity to improve communication between the agencies, the legislative body, OFM, other key stakeholders and constituents regarding capital construction practices and performance.*

WSDOT agrees. Recently, WSDOT has made important progress in communicating the intent, progress, and results of our construction program, but there is always room for improvement. WSDOT looks forward to working with OFM, other agencies, and the

Mr. Jim Hedrick  
December 2, 2002  
Page 2

legislature in this area. To begin the discussion, please reference our web pages for Key Projects found at <http://www.wsdot.wa.gov/projects/> and the WSDOT 2002 Construction Program Highlights at <http://www.wsdot.wa.gov/projects/2002highlights/default.htm>.

Finding Three

*Generally, the agencies' capital construction performance measures are not clearly tied back to organizational or departmental goals and objectives.*

WSDOT will continue to work with OFM and the legislature to refine the linkage of organizational goals and objectives with construction performance measures.

Finding Four

*In none of the agencies audited did we discover an appropriate mechanism or set of criteria routinely used to determine project delivery strategy and/or contract compensation vehicles.*

WSDOT and other state transportation agencies throughout the country have long records of successful contracting with the use of Design/Bid/Build contracting, and Unit Pricing contract compensation. In fact, it is only in the past few years that other construction methods have been allowed and experimented with in the area of highway construction. In Washington State, there are still legal restrictions on the use of other methods of contracting. We agree that a methodology for selection of these procurement strategies could be useful, but do not feel that a uniform methodology can appropriately cover both highways and buildings. WSDOT will be pleased to work with OFM and the legislature to develop appropriate procurement evaluation and selection methods.

Finding Five

*We observed an opportunity for improvement of each agency's ability to measure and report project/program performance in terms of scope, schedule, and budget at the portfolio level.*

WSDOT has made strides during the past year in communicating individual project progress, but the topic that is highlighted in this finding clearly needs additional work. As WSDOT testified in a hearing of the Senate Transportation Committee on September 19, 2002, a modern project information management system is lacking at WSDOT and will require significant resource commitment to install. In the meantime, quarterly portfolio level reports on budget issues are provided to the best of the capability of the existing system. (See *Capital Improvement and Preservation Program Delivery Report; Transportation Executive Information System*). WSDOT's systems lack, however, any capability for portfolio level reporting on scope and schedule management. WSDOT is implementing a project delivery information system (PDIS) that will address some of

Mr. Jim Hedrick  
December 2, 2002  
Page 3

these needs, but lacks sufficient funds to complete this system or to fully adapt it to the project management information system needs of large proposed projects.

Sincerely,

A handwritten signature in black ink, appearing to read "Douglas B. MacDonald", with a long horizontal flourish extending to the right.

Douglas B. MacDonald  
Secretary of Transportation

DMB:jn



Cheney • Spokane

**Michael Irish**, Associate Vice President for Facilities and Planning  
Business and Finance SHW 307  
526 5th Street  
Cheney, WA 99004-2431

November 25, 2002

Jim Hedrick  
Office of Financial Management

Re: Capital Construction Practices  
Limited Scope Performance Audit

Having reviewed the Draft Report of the above referenced document and after discussing it with Fred Jordan of KPMG, I submit the following response:

The Scope, Approach and Methodology stated is accurately portrayed as involves KPMG's meetings and discussions with Eastern Washington University.

In the Findings and Recommendations section, I had some problems understanding who the "audience" was for this report. It is obviously not the agencies, because the recommendations cannot necessarily be implemented by us.

**Finding One:** Given the difference in the agencies audited, I can fully understand why there would be little commonality or standardization amongst the agencies in the areas noted. I have noted that no two agencies administer or monitor capital in the same manner. While each are different, all can still be functional within their own systems. I understand that this is meant to provide us with a common toll that will assist us in monitoring Cost and Schedule Performance and that will probably make future performance audits easier on the auditing consultant.

**Finding Two:** My response would be similar to the one provided to Finding One. Again, it would provide another tool that will benefit more those agencies that have information provided to them than those agencies doing the reporting.

**Finding Three:** In reviewing the information provided, I do not really see that this Finding is as applicable to Eastern as stated in the report. However, the recommendation certainly provides guidelines for tweaking a system that we feel already works well for our program.

**Finding Four:** This finding is really not applicable to the regional institutions as we are limited to the design-bid-build delivery method and standard contract payment method for a contract compensation vehicle. I do support the recommendation.

voice: (509) 359-6878 fax: (509) 359-4336 email: Michael.Irish@mail.ewu.edu  
Eastern Washington University is committed to equal opportunity and affirmative action in employment.

**Finding Five:** I agree that, as explained, this is a deficiency which needs to be addressed. However, at the regional institutions, this would not have the same import as at the larger agencies.

**Observations:** I agree with all of the observations noted in this report.

**Summary:** I must admit that I was somewhat surprised by the final Draft Report. Having gone through the audit and provided the information requested, I must admit that the final report was certainly not what I was expecting, neither in format nor in content. I did find the audit team to be helpful, conscientious and very forthcoming at all times. They were a pleasure to work with.

Michael L. Irish  
Associate Vice President for Facilities and Planning

**EVERGREEN**  
**THE EVERGREEN STATE COLLEGE**  
Michel George  
Director of Facilities  
Facilities Services

**Mr. Fred Jordan**  
KPMG LLP  
3100 Two Union Square  
601 Union Street  
Seattle, WA 98101

November 26, 2002

Dear Mr. Jordan:

Per your request I have reviewed the Capital Construction Practices Draft Report dated November 15, 2002. You and I discussed my comments on the phone earlier today. I noted that I had concerns that the report did not adequately reflect the positive tone and emphasize best practices as originally described. You agreed that some of the comments needed to be clarified and added that you were in the process of redrafting the report and read me some of the amended sections. Both you and I agreed that the amended sections reflected my concerns.

Areas I raised concerns about were:

**Section II** Results in brief did not indicate clearly that the agencies were overall doing a good job running capital projects.

**Finding One** as written appeared to be adding more of a paperwork burden to the agencies rather than reflecting your concern of a more standardized reporting system that ultimately would lessen the paperwork burden. In our phone conversation you recommended replacing current reporting with a more abbreviated consistent reporting methodology.

**Finding Two** similar comments to Finding one.

**Finding Four** TESC agreed with this recommendation but recommended you include language that clarified not all agencies have same authority to use various construction delivery methods i.e. TESC is not authorized to use a number of the construction delivery strategies you noted.

**Finding Five** TESC agreed and recommended you add language about the cost of installation of databases to monitor these issues and address additional institutional funding for them as part of the recommendation.

**Observation One** TESC noted that the FCI under discussion was currently being proposed for Higher Education.

**Observation Two** recommended you add language to clarify that what is needed is clarification on how the institutions could effectively ensure awarding to "Lowest Responsive Bidder"

I'd like to add how much I've enjoyed working with you and Rose on this project and appreciate the effort that both of you and KPMG have put into making this a viable and meaningful document. Additionally I'd like to add how inclusive you have been through the process and how responsive you have been to our feedback.

Sincerely

Michel George  
Director of Facilities



UNIVERSITY OF WASHINGTON

November 21, 2002

TO: Jim Hedrick  
Office of Financial Management

FROM: Alan Nygaard, Business Manager  
University of Washington Capital Projects Office

RE: Capital Construction Practices by KPMG

Dear Mr. Hedrick:

We have had a short period to review the Capital Construction Practices Performance Audit prepared by KPMG and appreciate your time in reviewing our comments regarding the document. We believe KPMG performed this audit in a very limited time frame and as such are to be commended for the effort to review such a varying group of agencies with such a broad scope of effort.

The KPMG Audit Report has several findings on which we would like to make the following comments. The highlighted sections are extracted from the draft audit report.

***Finding One:***

***There appears to be an opportunity to improve the standardization within and between each agency related to performance management practices and measures.***

Under this finding KPMG suggests several performance measures that can be provided to stakeholders and to review these performance measures in historical mode of the agency rather than a comparative mode amongst differing agencies. This appears to be a reasonable approach in that the information is provided on an individual project. Our concern is that on the University of Washington Campus it is very difficult to determine what projects are similar to one another. Currently we have four major new construction projects underway. These projects are similar in that each are within the same proximity

and the same bidding climate and vendors and basically they are all buildings that will be used by the faculty, students and staff at the University of Washington. Beyond those

few similarities they are all differing project. These differences include such things as a law library, hospital wing, engineering labs, instructional space or below grade parking. It may seem simple to produce a per square foot calculation for these projects for comparison but the program performed by each building is quite different and without normalizing the costs, the comparisons would be like comparing apples and oranges.

We question if a meaningful comparison can be made among the projects and for what purpose. We have an obligation to the stakeholders of the individual capital project to report cost and schedule performance and these could be done in a meaningful manner with those people familiar with the project and understand the context of the performance measures. Reporting these items in some standardized process to a state agency that is not familiar with the project would be another report required from the University that would have little value.

***Finding Two***

***There appears to be an opportunity to improve communication between the agencies, the legislative body, OFM, other key stakeholders and constituents regarding capital construction practices and performance.***

The above finding includes recommendation for the improvement of communications. Anytime better understanding of the issues from any and all stand points is considered to be progress and we concur with KMPG's recommendations.

***Finding Three***

***Generally, the agencies' capital construction performance measures are not clearly tied back to organizational or departmental goals and objectives.***

The above recommendations is meant for all the agencies involved in the audit The University may have specific goals established for our capital program but we may not be communicating them well enough for all interested parties. This is a good opportunity for us to review our goals and make improvements to our process and reporting.

***Finding Four***

***In none of the agencies audited did we discover an appropriate mechanism or set of criteria routinely used to determine project delivery strategy and/or contract compensation vehicles.***

The recommendation regarding the above finding suggests that additional tools should be made available to agencies for the for project delivery. We agree that the more tools that are available and by matching of appropriate delivery systems to the project can make the capital projects process more efficient. By placing the opportunity for tool selection closest to the project organizations allows the decision makers the ability to make efficient and effect decisions regarding the delivery of the project. There is a need to



maintain a competitive process for the delivery of projects but in some cases the process itself may become more expensive than the project. Allowing unique projects to be reviewed on individual basis and let the appropriate rules be applied to the project then examine performance measures over time to determine the most efficient systems available would be a benefit.

***Finding Five***

***We observed an opportunity for improvement of each agency's ability to measure and report project/program performance in terms of scope, schedule and budget at the program level.***

The recommendations under the above finding indicate room for improvement in the reporting process to our stakeholders. We appreciated the fact that the KPMG acknowledges the variety of agencies and that there is not a one size fits all for the reporting of project information. The University of Washington has made a significant investment in the project management system and appreciates the acknowledgement of KPMG for our efforts. We understand that other agencies may not receive the same level of benefits that UW has received with the implementation of the same system. Smaller agencies may not have the same level of activities and should find a process that meets their needs and not a demand that would only add to an already burdensome process.



Capital Construction Practices  
Limited Scope Performance Audit  
Draft Report dated November 15, 2002

Washington State University finds the draft report to be a positive assessment of the findings identified by consultants KPMG.

We support their comments regarding:

- the need to improve communications between all state agencies relating to the way major capital projects are managed,
- that "stakeholders must define their needs in terms of performance measures and effectively communicate this with each agency" (pg.6),
- the positive impact of revisiting agency goals, objectives and performance measures periodically,
- state sponsorship of regular meetings of all agencies to collaborate and communicate project delivery strategies and contracting issues, and
- the necessity of improving measurement and reporting performance activities.

While we find these recommendations to be valid, WSU must caution State administrators that if these recommendations are to be implemented, additional FTE positions and equipment will be necessary. Increased reporting responsibilities, cost of travel to Interagency meetings, and revisions to current project delivery reporting methods will significantly add to the present workload of the agency's staff.

## ***Appendix B: Yellow Book Matrix***

**Table 1**  
**Yellow Book Matrix**

<b>Yellow Book Requirement</b>	<b>Action</b>
<b>Field Work Standards</b>	
<b>I. Planning</b>	
› Significance and User Needs	See Project Plan dated October 9, 2002
› Understanding the Program	See Project Plan dated October 9, 2002
› Criteria	See Project Plan dated October 9, 2002
› Audit Follow Up	See Project Plan dated October 9, 2002 and Chapter 1 of this report
› Considering Others' Work	See Project Plan dated October 9, 2002 and Chapter 1 of this report
› Staff and Other Resources	See Project Plan dated October 9, 2002
› Written Audit Plan	See Project Plan dated October 9, 2002
<b>II. Supervision</b>	See Part Four of this document.
<b>III. Compliance with Laws &amp; Regulations</b>	
› Illegal Acts and Other Non-Compliance	No instances observed
› Abuse	No instances observed
› Obtaining Information About Laws, Regulations, and Other Compliance Requirements	No instances observed
› Limitations of an Audit	See chapter 1 of this report
<b>IV. Management Controls</b>	
<b>V. Evidence</b>	
› Audit Findings	See chapter 2 of this report
› Tests of Evidence	KPMG discussed its tests of evidence in Chapter 1 of this report
› Working Papers	The KPMG project team constructed and maintained project workpapers for this engagement.

**Table 1**  
**Yellow Book Matrix (cont'd)**

<b>Yellow Book Requirement</b>	<b>Action</b>
<b>Reporting Standards</b>	
<b>I. Form</b>	See Final report submitted on January 13, 2003
<b>II. Timeliness</b>	See Final report submitted on January 13, 2003
<b>III. Report Contents</b>	
› Objectives, Scope & Methodology	The objectives, scope and methodology are stated in Chapter 1 of this report.
› Audit Results	Significant findings and conclusions are addressed in Chapter 2 of this report.
› Recommendations	Recommendations are in Chapter 2 of this report.
› Statement on Auditing Standards	The audit was conducted in accordance with generally accepted government auditing standards as stated in Chapter 1.
› Compliance with Laws and Regulations	Related findings and conclusions are addressed in Chapter 2 of this report.
› Management Controls	Related findings and conclusions are addressed in Chapter 2 of this report.
› Views of Responsible Officials	Views of responsible officials of the audited agency concerning KPMG's findings, conclusions, recommendations and corrections planned by the respective official(s) are addressed in Appendix A of this report.
› Noteworthy Accomplishments	Noteworthy accomplishments of each agency that are within the scope of, and identified during, the audit are addressed in Chapter 2 of this report.
› Issues Needing Further Study	KPMG reported and referred significant issues needing further audit work to auditors within each agency responsible for planning future audit work in Chapter 3.
› Privileged & Confidential Information	Not Applicable
<b>IV. Report Distribution</b>	Final report delivered to OFM on January 13, 2003